

| DEPTH (FEET) | OTHER TESTS | SHEAR STRENGTH PSF | ATTERBERG LIMITS | | | FIELD MOISTURE CONTENT % | DRY DENSITY PCF | WATER LOSS (LUGGONS) | PERCENT RECOVERED | NO. |
|-----------------|----------------|--------------------------|----------------------|-----------------------|--------------------------|--------------------------------|--------------------|-------------------------|----------------------|-----|
| | | | LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | | | | | |
| 0 | | | | | | | | | | |
| 5 | | | | | | | | | | |
| 10 | | | | | | | | | | |
| 15 | | | | | | | | | | |
| 20 | | | | | | | | | | |
| 25 | | | | | | | | | | |
| 30 | | | | | | | | | | |
| 35 | | | | | | | | | | |
| 40 | | | | | | | | | 98 | 92 |
| 45 | | | | | | | | | | |
| 50 | | | | | | | | | 100 | 99 |
| 55 | | | | | | | | | | |
| 60 | | | | | | | | | 100 | 98 |
| 65 | | | | | | | | | | |
| 70 | | | | | | | | | 97 | 92 |
| 75 | | | | | | | | | | |

BORING L-4

SURFACE ELEVATION 581.6

ELEVATION
(FEET)

| BLOW COUNTS SAMPLES | SYMBOLS | DESCRIPTIONS | |
|------------------------|---------|---|------|
| 0 | SM | DARK BROWN SILTY FINE SAND WITH ORGANIC DEBRIS (VERY LOOSE) | —580 |
| 13 | SP | GRAYISH-BROWN FINE SAND WITH SOME SILT (LOOSE) (EQUALITY FORMATION) | |
| 18 | | GRADES TO BROWN FINE TO MEDIUM SAND, VERY CLEAN | —575 |
| | ML | BROWNISH-GRAY CLAYEY SILT WITH SAND AND OCCASIONAL GRAVEL (STIFF) (WEDRON FORMATION) | |
| 48 | | | —570 |
| | GW | GRAVEL COBBLES AND BOULDERS | |
| 51 | | BROWNISH-GRAY SANDY SILT WITH SOME CLAY AND OCCASIONAL FINE GRAVEL (HARD) | —565 |
| 100 2' | ML | | —560 |
| 150 4' | ML | GREENISH-GRAY FINE SANDY SILT WITH TRACE OF CLAY, MICACEOUS, OCCASIONAL SHALE AND SANDSTONE GRAVEL (HARD) (RESIDUAL SOIL) | —555 |
| 240 | ML | GRAY FINE SANDY SILT WITH TRACE OF CLAY, MICACEOUS, LAMINATED (HARD) | —550 |
| | | TOP OF BEDROCK (CARBONDALE FORMATION) GRAY SILTSTONE, FINE SANDY AND MICACEOUS; THINLY LAMINATED; WEATHERED, MODERATELY FRIABLE; 30° TO NEAR VERTICAL FRACTURES SPACED 2 TO 12 INCHES | —545 |
| | | GRADES WELL INDURATED BELOW 42.2 FEET; BASE OF WEATHERED ZONE | —540 |
| | | | —535 |
| | | 45° FRACTURE AT 48.0 FEET | |
| | | | —530 |
| | | 45° FRACTURE AT 55.9 FEET | —525 |
| | | 60° FRACTURE AT 58.6 FEET | —520 |
| | | GRAY SILTY SHALE, FINELY MICACEOUS; THINLY LAMINATED | —515 |
| | | 30° FRACTURE AT 68.9 FEET 45° FRACTURE AT 70.5 FEET 45° FRACTURES AT 71.8 FEET 30° FRACTURES AT 72.5 FEET | —510 |

BORING CONTINUED

BRAIDWOOD STATION UPDATED FINAL SAFETY ANALYSIS REPORT

FIGURE 2.5-157

LOG OF BORING L-4
(SHEET 1 OF 5)

| DEPTH (FEET) | OTHER TESTS | SHEAR STRENGTH PSF | ATTERBERG LIMITS | | | FIELD MOISTURE CONTENT % | DRY DENSITY PCF | WATER LOSS (LUNGEON) | PERCENT RECOVERED | ROD |
|-----------------|----------------|--------------------------|----------------------|-----------------------|--------------------------|--------------------------------|--------------------|-------------------------|----------------------|-----|
| | | | LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | | | | | |
| 75 | | | | | | | | | | |
| 80 | | | | | | | | | 95 | 70 |
| 85 | | | | | | | | | | |
| 90 | | | | | | | | | 99 | 85 |
| 95 | | | | | | | | | | |
| 100 | | | | | | | | | 95 | 81 |
| 105 | | | | | | | | | | |
| 110 | | | | | | | | | 96 | 86 |
| 115 | | | | | | | | | | |
| 120 | | | | | | | | | 100 | 80 |
| 125 | | | | | | | | | | |
| 130 | | | | | | | | | 100 | 100 |
| 135 | | | | | | | | | | |
| 140 | | | | | | | | | 95 | 92 |
| 145 | | | | | | | | | | |
| 150 | | | | | | | | | 100 | 93 |

BORING L-4 CONTINUED

ELEVATION
(FEET)

SYMBOLS

DESCRIPTIONS

BLACK COAL; THINLY LAMINATED TO THIN BEDDED; NUMEROUS VERTICAL TIGHT FRACTURES WITH SOME PYRITE AND CLAY

—505

DARK BROWNISH-GRAY SILTY SHALE, CARBONACEOUS; THINLY LAMINATED; NEAR VERTICAL FRACTURE 79.4 TO 80.0 FEET
LIGHT GRAY SILTSTONE, FINE SANDY IN ZONES, MICACEOUS; THINLY LAMINATED, INDISTINCT IRREGULAR BEDDING (SPOON FORMATION)

—500

—495

DARK BROWNISH-GRAY SHALE, CARBONACEOUS; THINLY LAMINATED; FRAGMENTED WITH SLICKENSIDES
LIGHT GRAY VERY SILTY SANDSTONE, FINE GRAINED, MICACEOUS; THINLY BEDDED.

—490

LIGHT GRAY FINE SANDY SILTSTONE, MICACEOUS; THINLY LAMINATED, IRREGULAR

—485

LIGHT TO DARK BROWNISH-GRAY CLAYEY SHALE; INDISTINCTLY LAMINATED; FRAGMENTED WITH NUMEROUS RANDOM SLICKENSIDES

—480

GRADES MOTTLED RED AND GREEN COLOR AT 103.5 FEET

BROWN SILTY SANDSTONE WITH OOLITIC IRON GRANULES
LIGHT BROWN TO GREENISH-GRAY DOLOMITE, FINE TO MEDIUM CRYSTALLINE, SILTY; THIN BEDDED, NUMEROUS THIN IRREGULAR GREEN SHALE PARTINGS SPACED 1/2 TO 5 INCHES (ALEXANDRIAN SERIES)

—475

—470

VERTICAL FRACTURE WITH DRUSY CRYSTALLINE SURFACE FROM 113.1 TO 114.1 FEET

VERTICAL FRACTURES SPACED 1/2 INCH FROM 115.0 TO 117.7 FEET, TIGHT TO WELL HEALED

—465

—460

—455

LIGHT GREENISH-GRAY TO DARK GRAY SILTSTONE, DOLOMITIC; THINLY LAMINATED (BRAINARD FORMATION)

—450

—445

DARK GREENISH-GRAY SHALE, SILTY, DOLOMITIC; THINLY LAMINATED, PARTS EASILY ALONG BEDDING PLANES

—440

—435

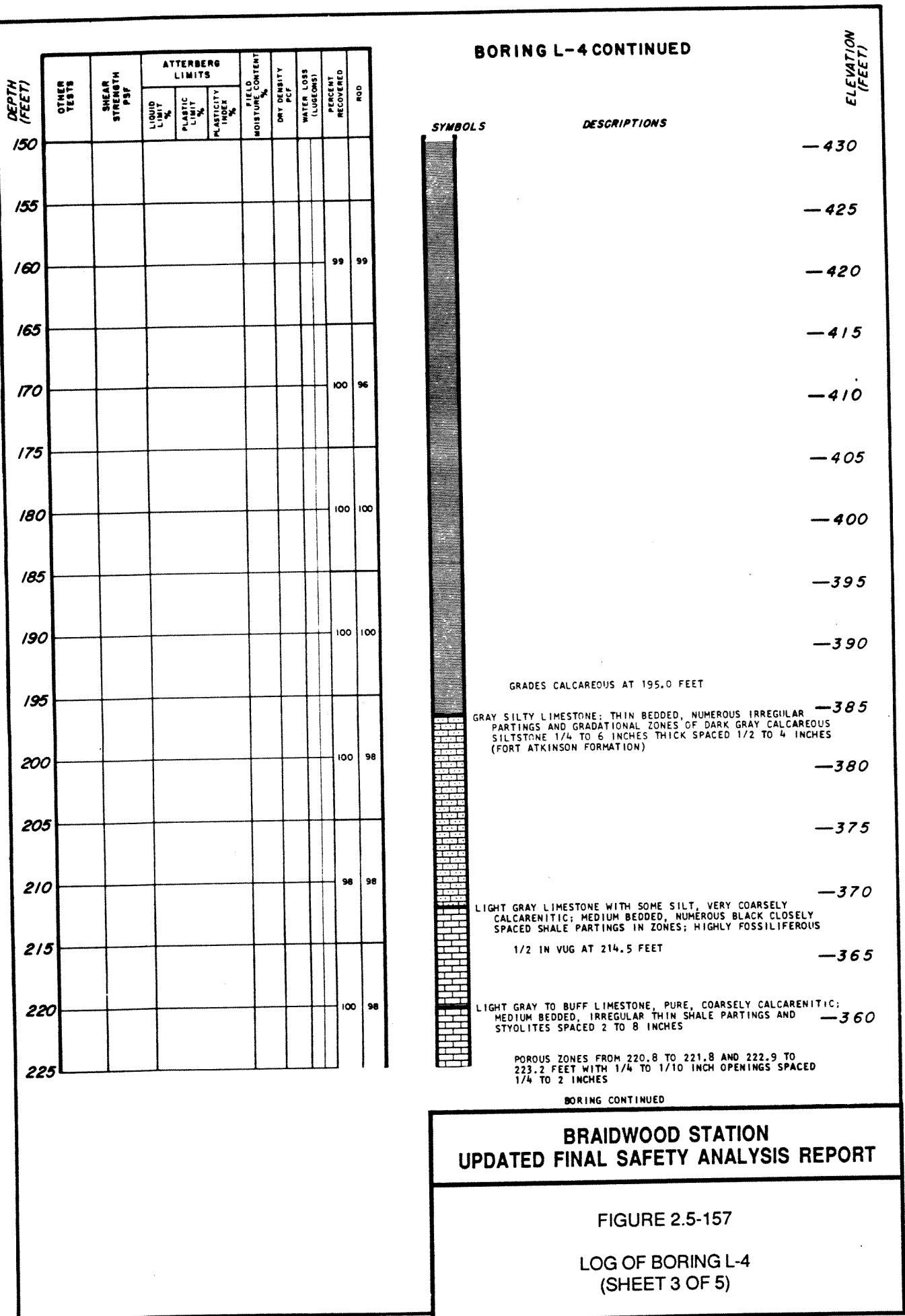
45° FRACTURE AT 149.2 FEET

BORING CONTINUED

BRAIDWOOD STATION UPDATED FINAL SAFETY ANALYSIS REPORT

FIGURE 2.5-157

LOG OF BORING L-4
(SHEET 2 OF 5)



BORING L-4 CONTINUED

| DEPTH (FEET) | OTHER TESTS | SHEAR STRENGTH PSF | ATTERBERG LIMITS | | | FIELD MOISTURE CONTENT % | DRY DENSITY PCF | WATER LOSS (LUGEONS) | PERCENT RECOVERED | ROD |
|-----------------|----------------|--------------------------|----------------------|-----------------------|--------------------------|--------------------------------|--------------------|-------------------------|----------------------|-----|
| | | | LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | | | | | |
| 225 | | | | | | | | | | |
| 230 | | | | | | | | | 100 | 100 |
| 235 | | | | | | | | | | |
| 240 | | | | | | | | | 100 | 100 |
| 245 | | | | | | | | | | |
| 250 | | | | | | | | | 100 | 100 |
| 255 | | | | | | | | | | |
| 260 | | | | | | | | | 100 | 100 |
| 265 | | | | | | | | | | |
| 270 | | | | | | | | | 100 | 100 |
| 275 | | | | | | | | | | |
| 280 | | | | | | | | | 96 | 87 |
| 285 | | | | | | | | | | |
| 290 | | | | | | | | | 100 | 100 |
| 295 | | | | | | | | | | |
| 300 | | | | | | | | | | |

SYMBOLS

DESCRIPTIONS

ELEVATION
(FEET)

—355

—350

—345

—340

—335

—330

—325

—320

—315

—310

—305

—300

—295

—290

—285

GRAY CALCAREOUS SILTSTONE, FINE SANDY, LAMINATED, HIGHLY FOSSILIFEROUS IN ZONES WITH NUMEROUS VERY THIN IRREGULAR WHITE BANDS, INTERBEDDED GRADATIONAL LAYERS OF SILTY LIMESTONE 1 TO 6 INCHES THICK, SPACED 1 TO 12 INCHES; PINPOINT POROSITY AND 1/4 INCH OPEN VUGS SPACED 1/2 TO 2 INCHES FROM 233.3 TO 233.7 FEET (SCALES FORMATION)

1 INCH OPEN VUG AT 237.2 FEET, MINERAL DEPOSITS

GRAY SILTY SHALE, CALCAREOUS; THINLY LAMINATED; INTERBEDDED GRADATIONAL ZONES OF SILTY LIMESTONE 1 TO 6 INCHES THICK, SPACED 4 TO 16 INCHES

GRADES TO INTERBEDDED LAYERS OF LIGHT GRAY SILTY LIMESTONE 6 TO 16 INCHES THICK, SPACED 7 TO 32 INCHES

DARK GRAY SHALE, DOLOMITIC; THICKLY LAMINATED, OCCASIONAL INTERBEDDED ZONES OF LIGHT GRAY CALCAREOUS SILTSTONE OR VERY SILTY LIMESTONE 2 TO 6 INCHES THICK, SPACED 2 TO 4 FEET

CALCAREOUS SILTSTONE LAYERS GRADE OUT BELOW 290.0 FEET

BORING CONTINUED

BRAIDWOOD STATION UPDATED FINAL SAFETY ANALYSIS REPORT

FIGURE 2.5-157

LOG OF BORING L-4
(SHEET 4 OF 5)

| DEPTH (FEET) | OTHER TESTS | SHEAR STRENGTH PSF | ATTERBERG LIMITS | | | FIELD MOISTURE CONTENT % | DRY DENSITY PCF | WATER LOSS (LUGGERS) % | PERCENT RECOVERED | ROD |
|-----------------|----------------|--------------------------|----------------------|-----------------------|--------------------------|--------------------------------|--------------------|------------------------------|----------------------|-----|
| | | | LIQUID LIMIT % | PLASTIC LIMIT % | PLASTICITY INDEX % | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| 300 | | | | | | | | | 99 | 99 |
| 305 | | | | | | | | | | |
| 310 | | | | | | | | | 100 | 96 |
| 315 | | | | | | | | | | |
| 320 | | | | | | | | | 100 | 100 |
| 325 | | | | | | | | | | |
| 330 | | | | | | | | | 100 | 100 |
| 335 | | | | | | | | | | |
| 340 | | | | | | | | | 100 | 100 |
| 345 | | | | | | | | | | |
| 350 | | | | | | | | | | |

BORING L-4 CONTINUED

SYMBOLS



DESCRIPTIONS

GRADES TO OCCASIONAL SMALL PYRITE
CONCRETION BELOW 317.0 FEET

MOTTLED LIGHT GRAY AND BUFF DOLOMITIC LIMESTONE,
FINE TO MEDIUM CRYSTALLINE; THIN BEDDED, NUMEROUS
IRREGULAR HAIRLINE SHALE PARTINGS SPACED 1/4 TO 3 INCHES
(WISE LAKE - DUNLEITH FORMATIONS)

POROUS ZONE WITH NUMEROUS 1/4 TO 1/10 INCH OPENINGS
FROM 327.3 TO 328.2 FEET

1/2 INCH VUG AT 333.0 FEET

1/2 INCH CRYSTAL LINE VUG AT 342.7 FEET

BORING COMPLETED AT 345.7 FEET
ON 10-13-72
300 POUND HAMMER FALLING 18 INCHES

BRAIDWOOD STATION UPDATED FINAL SAFETY ANALYSIS REPORT

FIGURE 2.5-157

LOG OF BORING L-4
(SHEET 5 OF 5)